DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-015081
Date Inspected: 20-Jun-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 1900
OSM Departure Time: 700
Location: Shanghai, China

CWI Name:	See Below			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG

Summary of Items Observed:
CWI Inspectors: Mr. Lv Li Qing, Mr. Zhu Zhong Hai

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Segment Trial Assembly

This QA Inspector observed ZPMC welder Mr. Li Zheng Qiang, stencil 066038 is using shielded metal arc welding procedure WPS-B-P-2114-FCM-1 to make OBG segment 8BW hold back weld OBW8B-050 between an edge plate and a side plate. This QA Inspector measured a welding current of approximately 170 amps. This QA Inspector observed that Mr. Li Zheng Qiang appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Li Bing, stencil 069896 is using shielded metal arc welding procedure WPS-B-P-2114-TC-U4b-FCM-1 to make OBG segment 8AW weld SSD12A-PP68-169. This QA Inspector measured a welding current of approximately 175 amps. This QA Inspector observed that Mr. Li Bing appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Jiang Jingong, stencil 066361 is using shielded metal arc welding procedure WPS-B-P-2114-TC-U4b-FCM-1 to make OBG segment 8CW weld SSD12A-PP70-170. This QA Inspector measured a welding current of approximately 175 amps. This QA Inspector observed that Mr. Jiang Jingong appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Liu Dong, stencil 046469 is using shielded metal arc process WPS-B-T-4112-1 to tack weld SP3059F-001-077, OBG segment 13AW side plate stiffener plates to side plate SP3059F. This QA Inspector observed a welding current of approximately 150 amps and Mr. Liu Dong appears to be certified to make this weld. This QA Inspector observed ZPMC used a torch to preheat the base material prior to welding and the welding electrodes are being kept warm in a portable electrode storage container that is warm to the touch. Items observed by the QA Inspector appear to comply with project specifications.

This QA Inspector observed ZPMC welder Mr. Zhang Quin Quan, stencil 044774 is using flux cored welding procedure WPS-B-T-2132 to make OBG weld SP3060B-001-071 between a stiffener plate and OBG segment 13 side plate. This QA Inspector observed a welding current of approximately 320 amps and 31.0 volts, the base material appears to have been preheated with electric heating elements and that Mr. Zhang Quin Quan appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Jin Chen Mao, stencil 058551 is using flux cored welding procedure WPS-B-T-2132 to make OBG weld SP3060B-001-072 between a stiffener plate and OBG segment 13 side plate. This QA Inspector observed a welding current of approximately 300 amps and 30.0 volts, the base material appears to have been preheated with electric heating elements and that Mr. Jin Chen Mao appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Liu Kaige, stencil 044830 is using flux cored welding procedure WPS-B-T-2132 to make OBG weld SP3092B-001-023 between a stiffener plate and OBG segment 13 side plate. This QA Inspector observed ZPMC QC has recorded a welding current of 315 amps and 30.4 volts, the base material appears to have been preheated with electric heating elements and that Mr. Liu Kaige appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Dan Deyin, stencil 044795 is using flux cored welding procedure WPS-B-T-2132 to make OBG weld SP3092B-001-024 between a stiffener plate and OBG segment 13 side plate. This QA Inspector observed ZPMC QC has recorded a welding current of 308 amps and 30.2 volts, the base material appears to have been preheated with electric heating elements and that Mr. Dan Deyin appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer